OCT 13 '53

BRAZILIAN BULLETIN

Published by the Brazilian Government Trade Bureau, 551 Fifth Avenue, New York 17, N. Y.
(Under the Dept. of Industry & Commerce of the Ministry of Labor, Industry & Commerce of Brazil)

VOL. X | OCTOBER 1, 1953 | No. 235

Brazil $-Budgeting Yields 12-Mo. Surplus

No. 1 Steel Mill Advances

Lighting of New Coke Ovens Opens 2nd Phase of Volta Redonda's Operations

The first phase of expansion of Volta Redonda, Brazil's largest steel plant, moved into its final stages a few weeks ago, with the lighting of the twenty-one coke ovens of the new battery.

With the completion of this phase, the mill's output will be raised from the present figure of 450,000 tons of ingot steel a year to 710,000 tons.

The ignition of the ovens, which took place at an official ceremony, started the pre-operational stage of the expansion phase.

They will remain burning for seven weeks, Brazilian steelmen explain, to dry out the refractory bricks.

Official Lighting Ceremony

The first of the twenty-one units was lit by Mr. Café filho, Vice-President of the Republic, who received the igniting torch from General Sylvio Raulino de Oliveira, President of the National Steel Company.

Afterwards, directors of the company, senators, and other members of the official committee, took a part in the lighting ceremony, which was followed by a demonstration of coke discharging operations.

Will Operate Soon

The No. 2 blast furnace, essential part of the first expansion phase, is expected to be in operation before the end of 1953, and the complementary installations

(*See Page* 2)

Torrent of Brazilian Steel

A giant ladle pours a torrent of steel into ingot molds, under the vigilant eyes of Brazilian steelworkers, at Volta Redonda.

New Records Set at Volta Redonda

All-time production records were established in at least five sections of the Volta Redonda steel mill during the month of August, the National Steel Company's output statistics reveal.

Total tonnage of metal poured during the month was 42,874 tons, compared with the previous record of 42,720 tons established in December 1951.

(*See Page* 6)

$330 Million Balance Noted

Two-way Commerce for Year Ended June 30th Totaled Nearly $1.2 Billions

The first twelve months of dollar import budgeting produced an excess of earnings through Brazilian exports to the U. S., over dollar expenditures on imports from the U.S. of no less than $330 million, a comparison reveals.

It also shows that, despite inevitable restrictions, two-way trade for the year ended June, 1953, totaled nearly $1.2 billions.

The study, compiled on the basis of figures released by the Brazilian Treasury Delegation in New York, and the U.S. Department of Commerce, reveals that, between July 1952 and June 1953, U.S. imports from Brazil reached a figure of $763.2 millions, while Brazilian imports from the U.S. were trimmed to $432.9 millions.

Striking Contrast Noted

A comparison of Brazil's imports for the January-June period of 1952, and the corresponding period of this year shows an even more striking contrast, as for the former period a figure of $533 million was registered, whereas this year imports had been trimmed to $189 millions, a saving of $343 million, or about 60 percent.

(Of course, this favorable result on dollar trading with the U.S. does not represent a net dollar gain, in view of the large sums paid out by Brazil as interest, dividends and servicing on U.S. investments, and payments for dollar purchases for fuels, espe-

(*See Page* 2)

Brazil's Dollar-Budgeting Yields 12-Month Surplus

August Imports Dipped to $26 Million, All-time Low for Period

Favorable Export Results are Reported for Several Brazilian Commodities

(*From Page* 1)

cially from the Dutch West Indies.)

Continuation of the "belt-tightening" policy by Brazil was shown by the fact that July imports, including freight and charges, reached a figure of $32,-179,411, while in August, the Treasury Delegation reveals, the corresponding figure dipped to $26,019,722.

This is a new record low for the budgeting period.

Previous lowest month had been February, 1953, at $28.4 millions.

Eighteen Month Comparison

A tabulation, giving figures on two-trade between Brazil and the U.S. for the past eighteen months follows:

1952	*Brazilian exports to U.S., in $ millions*	*Brazilian imports from U.S., in $ millions*
January	69.9	103.1
February	80.4	99.0
March	74.5	100.8
April	66.9	101.2
May	48.2	67.5
June	49.4	61.0
July	49.6	49.7
August	63.1	47.5
September	88.9	41.8
October	76.7	34.2
November	57.7	30.7
December	81.7	39.4
1953		
January	57.9	30.7
February	58.6	28.4
March	67.5	33.3
April	59.7	34.3
May	43.2	29.3
June	48.6	33.6
July	*	32.2
August	*	26.0

** figures not yet published*

Success in the drive for exports, the positive counterpart of selective import controls in Brazil's foreign trade policy, was indicated by advance figures released by the National Coffee Institute, showing that coffee exports to the U.S. alone earned Brazil more than $45 million in August.

(U.S. figures on July and August imports are not yet available).

Measures to encourage exports now in execution are of two main types. Recently announced was a decision by the Bank of Brazil to establish a series of minimum prices on exports, up to which all export exchange must be sold to the bank at the official rate.

Export-Boosting Measures

Exchange over that limit may be sold on the free rate market or otherwise disposed of as the exporter desires.

This ruling applies to coffee, carnauba wax, ouricurí wax, cocoa, Brazil nuts (unshelled and shelled), oranges, menthol, tapioca flour, oiticica oil, sassafras oil, piassava, ipeca root, sisal, sisal wadding, castor oil, wet and dry hides, and stretched hides.

(Full details given in Brazilian Bulletin No. 232, for September 1).

For thirty-three other products, the most important of which include babassú oil, caroá fiber, cocoa sub-products, pinewood, tanned skins and hides, and Amazon lumber, the previous arrangement still prevails, and 50 percent of all exchange earnings may be sold at the free market rate. (Complete list of products given in Brazilian Bulletin No. 232).

Good Results Reported

Good export results are reported in a number of outstanding Brazilian export lines.

The Coffee Institute discloses that, through 28th August, coffee exports for the month had earned Brazil in addition to $45.5 million from U.S. previously mentioned, $5.5 million in German-held dollars, $1 million on sales to Italy, and $1 million on sales to Holland.

Exports to Sweden earned 33 million crowns, and to Denmark 20 million Danish crowns.

Belgium paid 23 million francs for its coffee purchases from Brazil and earnings from France totaled about 200 million French francs.

Between 1st and 27th August, the Institute added, 529,000 bags of coffee had been shipped from Santos, and a further 200,000 registered for shipment, and the port of Paranaguá, which has lately become the nation's second coffee port, had shipped 277,000 bags.

Advance estimates on September shipments were 1,400,000 bags. This estimate compares very favorably with the 7,425,739 bags shipped for the January-July period of 1953, which showed an average of about 1,060,800 bags, and thus indicates a probable increase of at least 40 percent.

Shipments of cocoa for the first six months of 1953 showed a very large increase over those for the same period of 1952.

Shipments Rise 100%!

Total exports for the period were 545,734 bags, a more than 100 percent boost over the 266,372 bags shipped in the previous corresponding period.

Cocoa shippers will benefit to the extent of about $5.00 per bag saleable on the free market, under the new rulings established by the Superintendency of Currency and Credit.

The cotton situation has also become highly satisfactory. In July alone about 12,000,000 kilos were shipped, against 21,000,000 for the entire six-month period from January to June.

This would imply that July sales were 350 percent higher than the 3.5 million kilo a month average for the first half of the year, and bears out the comment recently made in the Brazilian press that the product is making a strong comeback on the international market.

Advance figures including August shipments show that over 45,000 tons of cotton were classified for export shipment by the end of that month, which com-

(*See Page* 6)

Lighting of New V. Redonda Coke Ovens Marks Start of 2nd Stage

New Blast Furnace Will be 20 Percent Larger than Plant's First Unit

(*From Page* 1)

during the first quarter of 1954, it has been disclosed.

Company President Raulino de Oliveira, in his speech at the official reception after the lighting ceremony, gave a concise picture of the present stage of progress of Volta Redonda.

"In igniting the gas in the interior of the twenty-one cells which will produce the coke for the consumption of the No. 2 Blast Furnace of Volta Redonda, 20 percent larger than the original blast furnace," General Rauliono de Oliveira pointed out, "we have set in motion one of the most important stages in the operation of the entire equipment that will make it possible for the steel mill to achieve an annual production of 710,000 tons of steel ingots a year."

He reminded his listeners that the new blast furnace had been manufactured in the U.S. from Volta Redonda's own steel.

"We hope that before the end of this year Blast Furnace No. 2 will be in full operation," the Brazilian steelman declared, "and that within the first quarter of 1954 the new steel furnaces and all the subsidiary equipment will be in use."

This includes the new electrolytic equipment.

"The mill will thus be equipped to provide more adequately for the increasing demand for steel rolling mill products on the Brazilian market.

"Work on this part of the project is well advanced and we are fortunate to be able to depend on preparing a reasonable part of the material in this plant.

"This is especially true in the case of the structural part of the new ovens, which was prepared in the new structural department of Volta Redonda . . . ."

The National Steel Company

(*See Page* 7)

Brazil Gets Electronic Valve Factory

Will be the First in South America

Exchange Savings of $2.5 Million Will be Obtained Thru' Local Production

The first electronic valve factory in Brazil (also a South American first) will commence operations in 1954, with an initial production of five million units yearly.

The industry, to be called IBRAPE, Indústria Brasileira de Produtos Eletrônicos e Eletricos, S.A., will thus provide Brazil with an exchange economy of about $2.5 million in otherwise necessary imports, within the next four years, it is estimated.

Many Types Will be Made

The plant, operating at the outset with a staff of five hundred, will make valves of the preferred U.S. types, as well as the classic Philips European type, and will, within a four year period, reach the point of making Brazil altogether self-sufficient in these products.

Series Listings Given

Among the preferred American types to be made in Brazil are the A.C. models 6BE6, 6BA6, 6Av6 and 6X4.

For receivers operating on both direct and alternating current, types 12BE6, 12BA6, 12AV6, 50C5 and 35W4 will be supplied.

For battery powered receivers, the types to be made will be: 1R5, 1T4, 1U5, 3V4. The classic Philips series will cover types: DCH 81, EL84, EZ80, ECL80, EL81, EY81, HL84, HCH81.

Modern Equipment Coming

Manufacturing equipment is to be supplied by the N.V. Philips Gloeilampenfabrieken, of Holland, will make it possible for the IBRAPE plant to produce wire trimmers, ceramic condensers, variable condensers, air trimmers, mica condensers, potentiometers, and other parts.

Electronic valve production in Brazil is the last step along the road towards a complete radio industry in Brazil.

Radio assembling was started in the country many years ago, and as item after item began to be produced in Brazil from Brazilian materials, the total output of sets also rose.

Radio Production Booms

Previously, volume of manufacture in Brazil was said not to justify a local electronic valve industry, but by last year total output of radio sets in Brazilian factories passed the half million a year mark, and it became an economic possibility.

Brazil's radio industry, which is today carried on by upwards of ninety industries, has been powerfully stimulated by the rapid development in broadcasting since the end of World War II.

200 Percent Increase!

In 1945, statistics show, there were about 110 stations operating whereas in 1950 that figure had grown to about 300, an increase of about two hundred percent in only five years, or about 40 percent yearly.

Progress in television has by no means lagged behind that of radio.

Twelve Channels Assigned

With three commercial stations operating, one cultural station (Roquette Pinto educational station) nearing conclusion, out of a total of twelve channels already assigned, interest is growing steadily.

A study made in 1952 showed that at that time there were upwards of 40,000 sets in use in Rio de Janeiro and São Paulo.

Local Manufacture Advances

Local manufacture of 20-inch sets has now been in progress for almost a year, and is scheduled to grow steadily as more and more TV transmitting stations are completed.

Nationwide Network

An important step in the direction of television progress was taken at the end of 1952, when President Getúlio Vargas signed a decree making provisions whereby it will eventually be possible to transmit a television program simultaneously from one end of Brazil to another, through a nation-wide network.

Concessions for television services would be granted in line with this master plan, which would permit as many as 292 television stations to function in the country eventually, it was disclosed at the time of approval of the plan.

Carmen Miranda at Bureau Display

Carmen Miranda, famed Brazilian movie and stage star, visits the exhibition of Brazilian products presented by the Brazilian Government Trade Bureau of New York during the Festival of Nations, at Burbank, Los Angeles.

Brazil & Germany Sign Trade Pact

2-Way Yearly Exchanges Totaling $284 Million are Established

Brazil and Germany concluded in September a trade agreement calling for two-way trade to a total of $284 million, and also providing for increasing German investment in Brazil.

Intensification of economic relations between the two countries, and of Brazilian industrial development, is also provided for through the setting up of a Joint Brazil-German Commission for Economic Development.

German Investments Coming

Greater application of German industrialization capital in Brazil is established under a clause whereby 30 percent of the German exports under the agreement, at the outset, will be composed of production equipment.

This proportion would represent slightly over $40 million annually in German equipment, initially.

Coffee Exports Stressed

Brazilian annual exports to Germany, under the terms of the agreement, will chiefly be composed of coffee to the value of $65 million, $25 million worth of cotton, $6.5 million worth of iron ore and $6 millions in cocoa.

Germany will also import annually oil-bearing fruits and seeds to a value of $4 millions, $5 million worth of skins and hides.

Shipments of pinewood and other timbers will amount to $2,750,000, a year, bananas, oranges and other fruits, to $1.5 million, and cotton linters, $1.5 million.

(*See Page* 4)

CORRECTION

Through a typographical error, recent issues of the *Brazilian Bulletin* have been misnumbered. Please note that the September 1 and September 15 issues should be numbered 233 and 234 respectively.

Brazil and Germany Sign Pact for $284 Million Trade

Two-Way Agreement Also Covers Substantial German Investments

Joint Economic Development Commission Will Also be Established in Rio

(*From Page* 3)

On the German side, $42 millions will be reserved for long term financing of essential equipment. Brazil will receive $16 millions in industrial machinery and equipment, $10 million in vehicles, including chassis.

Tractors, Rolling Stock

Yearly tractor imports by Brazil will amount to $3 millions, and rolling stock and other railroad equipment, $4 millions.

The country will receive metal plates, galvanized sheets, iron and steel tubes to a value of $4.5 million, $3 million worth of galvanized barbed wire and clips.

Finally, imports of $2.5 million in agricultural machinery and implements and $5 million of Portland cement are provided for.

Main Trade Conditions

The formal trade agreement signed between the countries contains the following clauses:

1) The Government of the Federal Republic of Germany, based on the agreement of August 29th, 1952, will promote the transfer of German capital to Brazil, for investment purposes;

2) The Government of the Federal Republic of Germany agrees as a general rule that German concerns associate with Brazilian concerns, or establish themselves for their own account in Brazil, by transfer of production goods;

Investments Encouraged

3) The German Federal government undertakes, under the terms of adjustment of exports to German merchandise to Brazil, to encourage investments in Brazil, granting facilities for the necessary supplies, for this purpose;

4) The two governments agree that, for this purpose, 30 per cent of German annual exports to Brazil at the outset shall be composed of production goods payable at medium and long terms.

Thus, in list "B" of the commercial adjustment between the governments of Brazil and the Federal Republic of Germany, of 17th August, 1950, the proportion referred to above shall be approximately $40 millions.

Five-Year Financing

At the present time, the Federal Government of Germany will provide financing for periods up to five years, through its specialized agencies.

5) For the achievement of the above-mentioned objectives, the two governments agree to set up a Joint Brazilian-German Economic Development Commission, with headquarters in Rio de Janeiro, for the purpose of studying public or private programs and projects meeting the economic interests of both countries;

Work of Joint Commission

7) The Joint Commission will receive and examine, for the purposes of Articles 1 and 3 of the Sole attachment, proposals or projects for German investments which:

a) result in expansion, diversification and improvement of Brazilian exports and/or

b) lead to an increase in internal production in essential sectors, and/or

c) contribute to establish general conditions for development suitable for the expansion of the domestic market, including the transport and power sectors and/or

Food Sector Stressed

d) contribute to an improvement in the internal supply of consumer goods, especially the food sector.

The attachment to the agreement specifies that the purposes of the Commission are to increase economic relations between the two countries, through recommendations for financing to be granted on undertakings of interest to the two governments and the development of techniques and methods to hasten agricultural, industrial and other development projects.

It also provides for an interchange of ideas, techniques and experience between the two countries, training of Brazilian technicians in Germany and provision of German technicians to assist in Brazilian development.

Brazilian Notes & News

RIO GRANDE DO SUL RAILROAD PROJECT IS APPROVED

Stepped-up railroad service in the state of Rio Grande do Sul is the object of a Joint Brazil-U.S. Commission project recently approved by President Vargas. (The Commission, dissolved at the end of July, is still publishing projects which were pending at that time).

The project is in two parts, the first of which covers remodelling of the permanent way, construction of variants, reinforcement of bridges and purchase of maintenance and stone-crushing equipment.

The latter part, for modernization of rolling stock, may consist either of partial dieselization with purchase of 25 new locomotives, or a greater degree of electrification based on thermo-electric plants powered by coal from the São Jerônimo and Candiota mines. A decision as to the alternative to be adopted will be taken later, at the time financing arrangements are studied.

BRAZIL'S IRON MOUNTAIN LOSES ALTITUDE

Brazil's famed "pico do Caué", a source of iron ore considered best in the world, is reported to be 50 meters lower than when mining operations started.

The ore is extracted mechanically by Companhia Vale do Rio Dôce from the peak of the mountain, which originally stood 1,372 meters above sea level.

The Vale do Rio Dôce Company also extracts ore from two other mines near Caué, called "Dois Córregos" and "Conceição", last year shipped 1.5 million tons of ore through the port of Vitória.

III PanAMERICAN ENGINEERING CONFERENCE DURING IV CENTENNIAL

The Third PanAmerican Engineering Conference will take place in São Paulo next May, as a part of the city's Fourth Centennial Celebrations, it has been announced in the Brazilian press.

The following agenda for the Brazilian section has been provisionally drawn up:

1) Diversification and coordination of highway, rail, maritime and aerial transports;

2) electric power and its expansion through the territory of Brazil;

3) engineering solutions to municipal problems;

4) expansion and city improvements in the Brazilian hinterland;

5) Public buildings in the interior;

6) Four centuries of São Paulo engineering and architecture.

An engineering exhibition will be held at the same time as the Convention, which is sponsored by the Brazilian Institute of Engineering and the Brazilian Federation of Engineering.

COMMISSION ON INTERNATIONAL MOVIE FESTIVAL APPOINTED

Recently appointed by a decree of the Brazilian Government is the Executive Commission for the First Brazilian International Movie Festival.

The Commission is to be responsible for the arrangements for the holding of the festival, which will be a part of the Fourth Centennial of the city of São Paulo, including arrangements for participation by foreign countries.

The Festival is to be held from 12th to 28th February, 1954, it has been disclosed.

NOTE

All material in this bulletin may be freely reprinted or quoted from. The Brazilian Government Trade Bureau may be credited as the source.

Production of 4½ Million Lbs. of Nickel a Year Is Set

Rich Minas Ores Will be Smelted

Niquelândia Deposits are Among the Largest in the Western Hemisphere

Production of about 4½ million pounds of nickel a year is scheduled to be obtained at Niquelândia, in the State of Minas Gerais, on one of the largest beds of nickel ore in the Western Hemisphere, it was recently disclosed.

The beds belong to a Brazilian organization, Companhia Niquel Tocantins.

Reserves Appraised

(Geologists A. L. Barbosa, of Brazil's National Department of Mineral Production, and W. T. Pecora, of the U.S. Geological Service, were reported in the Brazilian press to have estimated the size of the Niquelândia (formerly São José do Tocantins) nickel beds at a minimum of 20 million and a maximum of 75 million tons of black pebbles containing nickel, and located at a shallow depth).

Modern Processes Planned

Company president Jacques Amorim, stated that his company was employing some of the "most modern metallurgical processes in the world" with a view to supplying the entire Brazilian market with the metal.

The Brazilian industrialist pointed out that the operations of the company are closely linked in with the conclusion of the highway linking Niquelândia with Anápolis, in the state of Goiás.

The highway is being rapidly constructed under the auspices of the Federal government, it was stated.

Cobalt Also Present

An interesting sidelight to the nickel development, recently reported in the Brazilian press, by Eng. Avelino Inácio de Oliveira, Director of the National Department of Mineral Production, was the fact that cobalt is found in the Niquelândia nickel deposits, as an impurity in the ore.

It occurs in this site as a component of the ore known as asbolane (manganese bioxide with cobalt).

The proportion of cobalt contained in these deposits, according to official estimates, has been placed at about 1 or 2 percent.

Discovery in Brazil of deposits of cobalt (today known worldwide as a basic material for production of the so-called C-bomb) dates from fairly recent years, the Brazilian mining specialist declared.

Other Cobalt Sources

In Minas Gerais it has been found in manganese deposits, such as those close to the station of Usina, in Ouro Preto, and in Diamantina and Bom Despacho.

Cobalt is also found to the extent of about 1% in manganesiferous concretions in clay found near the city of São Paulo.

Importance of Nickel

Nickel is chiefly used in Brazil in the iron and steel industry. It is an important ingredient of alloy steels, (Nickel-steel is one of the products to be made at the important Brazilian alloy mill, Acesita, in its new expansion phase).

Chief uses of cobalt are for corrosion-resisting steels, electrolytic plating and catalyzers for the chemical industry.

Flowing Cornfields of So. Brazil

In the bracing upland climate of the South of Brazil, corn is a flourishing crop. Brazil rates second only to the U.S. as a corn-producing country. Latest step in corn industrialization is launching of locally-produced "Corn Flakes," with extensive utilization of by-products.

Rio is 12 Hours Now from London

500-Mile-an-Hour Jetliners Set New Record; Regular Services Set for '54

Rio de Janeiro is now only about twelve hours from London, by jet plane, a trial flight by a British aircraft has shown.

The flying distance between the two capitals is about six thousand miles.

Previous flights by planes powered by piston-motors, had taken about twenty-nine hours.

Although the aircraft actually took nearly twenty-one hours in the crossing, it is disclosed, much time was taken in studying airport approaches at the intermediate stops at Lisbon, Portugal, Dakar and Recife.

Two Lines Will Operate

A regular jet service by British Overseas Airways Corporation is scheduled to commence next year.

Jet services between Brazil and Europe are also scheduled to be started by Panair do Brasil in 1954, it had been announced earlier this year. An inaugural flight also took place recently.

Panair are likewise using 500-mile-an-hour de Havilland Comets on their jet service.

Panair do Brasil is believed to be the first airline in the world, after British Overseas Airways Corporation, to utilize these aircraft.

Airport Preparations

Preparations at Rio de Janeiro's Galeão international airport to receive jet flights included the lengthening of the main landing strip to ten thousand feet, to accommodate the fast-landing 'planes.

A further diagonal strip was also built, to allow planes to proceed direct from the debarkation strip to the take-off strip.

In accordance with modern principles of airport design, the Galeão airfield was also provided with built-in tubing for direct

(*See Page* 6)

Select Industrialization to Ease Dollar Shortage

Aim of New Brazilian Projects is Greater Self-Sufficiency

Exchange Difficulties are Reflection of Country's High Rate of Progress

(*From Page* 2)

pares with just over 25,000 tons by the same period of 1952, a boost of about 80 percent.

Strenuous budgeting of imports has imposed a severe strain on Brazil's economy, typical of what occurs in all cases where rapid development is achieved in a short period of time.

Basically, the disequilibrium is caused by the difficulty of raising export earning at a speed adequate to provide for imports needed by rapid industrial development.

In Brazil, however, the fruits of this industrial development are themselves gradually contributing to a long-range improvement in the foreign exchange situation.

A recent study by Conjuntura Economica showed that the value of imports to be substituted by internal production will be about $30 millions in 1954, and may rise to as much as $160 million by 1957.

Good examples of exchange-improving activities are the cement industry, recently favored with special duty-free privileges on imports of equipment.

This industry is being expanded to save Brazil the $30 million a year now being spent on imports, and eleven plants are reported under construction.

Steel expansion plans, which include the Volta Redonda million plan, the Piassaguera plant in São Paulo, the proposed Vitória mills, to be built by joint Brazilian and German capital, and the Laguna plant, to be constructed in Santa Catarina, will eventually avoid Brazil its existing expenditure of about $28 millions yearly for imports over and above internal production, and may even reverse the situation and provide an export surplus for countries short of hard currency.

Agricultural equipment imports, essential to Brazil's economy, are nevertheless a strain on foreign exchange reserves.

It is therefore encouraging to note that a contract signed between the National Motor Factory and the F.I.A.T. industrial group in Italy will lead to local manufacture of FIAT tractors and other products.

Meanwhile, the Massey-Harris group has announced plans to build their tractors in São Paulo.

Intensive manufacture of tractors within Brazil meets a long-felt need in the economy for more intensive farm industrialization, and this will also be the subject of the Klein commercial mission shortly due to arrive in Brazil for a survey of conditions in the Brazilian food industry, which may lead to rapid growth of farm industries with local production of finished foodstuffs in the growing centers, in line with modern techniques.

Investment Data Sought

Main function of the Klein mission is to provide U.S. capital with a reliable picture of how it can avail of the opportunities existing in expansion of the food industry in Brazil.

An interesting exchange-saving development in the petroleum field is the recently concluded agreement between Brazil and Bolivia, in accordance with which the two countires will each initially invest $1 million in the Bolivian petroleum fields.

Brazil undertakes to advance to Bolivia the amount of its participation in the project, receiving crude or refined petroleum in return, at the price of the day, payment being made by the joint Brazilian-Bolivian companies to be established for the exploitation of the fields.

The advance made to the Joint Brazil-Bolivia Commission will be expanded in the initial perfuration of petroleum wells, based on studies carried out by the Commission since 1938.

The importance of the sub-Andean petroleum beds lies in degree of purity of the products, as well as their abundance and the relative ease of extraction.

Rich Deposits Noted

According to Col. Floriano Pacheco, head of the Brazilian section of the Joint Commission, the margin of petroleum discovery is about 60% per well, compared to a world average of about 18%. Furthermore, it is stated, the purity of the petroleum is such that in certain places it is 75% gasoline, and could be utilized directly by I.C. motors.

The petroleum development is being supplemented by railroad projects, involving extension of existing lines into the heart of the Bolivian petroleum regions.

These developments, and many others, both in the field of export stimulation and bolstering of self-sufficiency industries domestically, hold promise for a forthcoming period of great improvement and strengthening of the Brazilian economy both internally and in its international aspects.

New Records Set at Volta Redonda

Production in Many Sectors Establishes New Highs During August

(*From Page* 1)

Steel ingot production was 44,262 tons, slightly above the previous all-time high of 44,231 tons, set up in the same month of 1951.

The December 1951 record for the rough-rolling mill, 38,023 tons, was hiked to 38,317 tons in August, and the total amount of plates rolled was increased to 26,857 tons, from a previous high of 26,354 tons.

Largest Increase

Largest individual increase was achieved in the hot plate rolling and plate reconditioning section, which marked up a production of 27,467 tons, more than 1,000 tons above the July total of 26,456 tons, which was itself a new record.

Rio is 12 Hours Now from London

Round-Up Reveals Brazil's Domestic Aeronautical Progress Also Rapid

(*From Page* 5)

supply of water, oil and kerosene to the jet planes.

Expenditure on the jet-landing project is estimated to have amounted to about Cr$18 millions, it was disclosed in the Brazilian press.

Shortening of the air-distance between London and Rio de Janeiro is in line with other recent developments in air-minded Brazil.

A few weeks ago, Aerovias Brasil (known abroad as Brazilian International Airlines) announced the largest South-American aircraft order of recent years, for twenty French Noratlas passenger and cargo planes, to boost its internal Brazilian services.

Manufacturing Advances

In the manufacturing field, it was disclosed that a São Paulo firm is now producing two-motor all-metal airplanes entirely designed and constructed in Brazil with the exception of the motors.

Two ambitious government aeronautical projects underway at the Technical Aeronautical Center, at São José dos Campos, in the State of São Paulo, are the building of two NACA-type wind-tunnels, each powered by 1,600 HP motors, and the construction of a new-type extra-large helicopter, said to be an outstanding milestone in Brazilian aeronautical history. São José dos Campos also plans to construct a Brazilian-designed jet-plane.

Regular aircraft construction in Brazil is being expanded to include the manufacture of jet-propelled Fokker training airplanes and other types, under a contract recently signed between the Dutch concern and the Brazilian government.

(For news on a proposed local helicopter transport plan, please see page 5 of Sept. 15 issue).

Volta Redonda Heads for Million-Ton Output

First Stage of Expansion Nears Conclusion; 2nd Stage is Pushed

No. 2 Blast Furnace is Designed for Capacity of 1,200 Tons a Day

(*From Page 2*)

President pointed out that, in view of the mounting demand for steel products in the country, the second stage plan had been drawn up while the first stage was still not complete.

This second stage will raise production to a figure of one million tons of ingot steel a year, and place Volta Redonda among the largest mills of its type in the world.

Capacity of the No. 2 Blast furnace will be for a maximum of 1,200 tons of pig iron daily.

It will be a complete self-contained unit, with all necessary accessories, such as regenerators, pouring section, a dust collecting battery, a gas washing device, three electrical precipitators, raw material silos and special loading systems.

The second blast furnace has a crucible 26½ feet in diameter, compared with 25 feet, for the first furnace, and is equipped with 18 blower tubes, whereas the No. 1 blast furnace has only 14 tubes.

50 Million Lb. Load!

The total height of the new furnace is about 250 feet, and the foundations contain more than 100,000 cubic feet of concrete, and are designed to support a total load of more than fifty million pounds.

Power for Volta Redonda is partly supplied by the Light & Power supply mains, and partly by a special private thermo-electric power station, designed to provide independent electricity for certain vital operations.

In line with the expansion project, the power plant is now undergoing further development, including installation of a further two boilers, one of which is specially constructed to burn fine ground coke, not utilized heretofore.

The plant will have a 10,000 kilowatt turbo-generator and a set of pumps for supplying raw water to the steel mill.

The steel shop itself will have two extra steel furnaces, with a capacity of 200 tons each, while the existing units have been enlarged from 150 to 180 tons.

An outstanding sector of the expansion phase of Volta Redonda is the construction of the Metallic Structures Plant, scheduled to start industrial production shortly.

Built with Own Products

The initial output will be channeled into the expansion project itself, for the supply of such items as the structural parts of the tank furnaces, the electrolytic tinning units and certain rolling mill equipment.

The structures plant is an integrated unit, planned along extremely modern lines, and designed so as to be able to handle both light and heavy parts, tanks and many other classes of manufactured goods.

The rolling mill is being considerably expanded, to handle the stepped-up flow of ingots from the pouring section, and will have two further batteries each containing two tank furnaces.

Increased production is scheduled not only for thick plates but also for strip, rails and sections, and galvanized sheets.

The Volta Redonda rolling stock park had to be considerably enlarged to take care of the first phase of expansion, and among the more interesting units acquired are two diesel car-mounted cranes, each with a boom nearly 150 feet in length, which are the largest in all South America.

Three 100-ton diesel locomotives and two 25-ton diesels as well as some sixty additional freight cars have also been put into operation.

Expansion work at Volta Redonda was recently reported to be providing work for no less than 2,200 workers, with many constructional sections operating on a three-shift basis.

Among the impressive aspects of Volta Redonda is a rolling mill building nearly four thousand feet in length, and a group of no less than sixty-five overhead cranes, the largest of which has a useful span of 250 feet, largest in South America.

It has been calculated that the total sweep of these cranes is about 33,000 feet.

The total amount of cement consumed in the buildings of Volta Redonda amounts to some twelve million cubic feet, or about enough to construct forty 25-floor skyscrapers.

Enormous Water Supply

The water supply for the Volta Redonda steel mills is estimated to be double the requirements of a city the size of São Paulo (over 2.5 million inhabitants), and the by-products obtained from the operations of the factory sustain a substantial proportion of the entire Brazilian chemical industry.

The main coal mines of the National Steel Company are located in Siderópolis (where the Coal Mining Department headquarters are situated), on the Dona Tereza Cristina Railroad, in Santa Catarina, South Brazil.

The company also obtains coal from a number of private coal mining organizations served by the same railroad.

One great advantage of the Siderópolis location is that many of the coal beds are of the surface type, and do not demand sinking of shafts. About eighty-percent of the Siderópolis coal is mined in this manner.

The covering layers of dirt are scraped off and the coal is removed with the use of power mechanical shovels.

Among the highly-mechanized pieces of equipment employed by the National Steel company in the Siderópolis region are Bucyrus steamshovels, skimmers and walking drag-lines.

Production in 1952, totaled 152,699 tons, and total reserves are about 14 million tons.

In addition, the National Steel Company last December acquired a controlling interest in the Soc. Carbonífera Próspera, S.A., which has 50 million tons of coal reserves, so that Volta Redonda is today assured of at least 64,000,000 tons of coal futures, enough for many years of operation. Developments are now under way in Siderópolis with a view to increasing the degree of mechanization by the installation of electric cutting devices and belt conveyors.

After being separated from the unproductive shale, by hydro-mechanical processes, the coal is taken by rail to Capivari, where the company's washing plant is located.

Three types of refined coal are obtained at Capivari, namely, metallurgical coal for the production of coke at Volta Redonda, coarse steam coal, for use in steam ships and locomotives, and fine steam coal, which is consumed in the Capivari thermo-electric power station.

Mainstay of Industry

This power station not only provides for the company's own requirements but is destined to become a mainstay of other industries in Santa Catarina.

At the end of July power lines from the plant reached the capital, Joinville.

At least fourteen other municipalities will be supplied as well, and some 1,000 industrial plants will avail of Capivarí power.

Eventually, the National Steel Company will supply power to the entire northern region of the state of Santa Catarina, including Florianópolis, the state's principle port.

Shipping and Ports

The whole of the coal produced for Volta Redonda in Santa Catarina flows through the ports of Imbituba (recenty renamed Henrique Lage) and Laguna, and the latter is the headquarters of the regional division of the company's Shipping Department.

Henrique Lage can accommodate ships drawing up to about 20 or 27 feet, and has a 3,000-ton ore silo installation with a modern conveyor belt supply system.

A break-water is being constructed to sheild the port from the strong prevailing West wind.

Though the port of Laguna can at present only take ships of smaller draft, dredging operations are now under way to deepen it.

OPPORTUNITIES IN BRAZILIAN TRADE

The Brazilian Government Trade Bureau has received the following inquiries from businessmen in Brazil, who desire to export or import the products listed below. These inquiries are published as received and no representation is made as to standings of listed firms. We suggest that the parties interested write directly to these firms, via airmail, as well as to this office, at 551 Fifth Avenue, New York 17, N. Y.

BUYERS WANTED

CARNAUBA WAX, GOAT and **SHEEP SKINS** and **CATTLE HIDES.** I. Borges Carvalho, Caixa Postal 718, Fortaleza, Ceará, Brazil.

OX BILE, with 1% of CAUSTIC SODA, in 200-liter drums, at price of Cr.$8,00 per kilo, and Cr.$200 deposit per drum. Laboratório Farmacêutico Magnus Ltda., Rua Almirante Baltazar 501, Rio de Janeiro, Brazil.

SISAL FIBER, WOODEN RAILROAD TIES, CASTORSEED, CAROÁ FIBERS. J. Vieira, Av. Severiano José Freire 534, Arcoverde, Pernambuco, Brazil.

SISAL FIBER, SISAL (first and second quality), **COTTON** (Matas, Sertão and Seridó), **COTTON LINTERS** (first and second cutting), **COTTON BY-PRODUCTS, SOLID OITICICA OIL, CASTOR OIL.** Miguel Alonso, Caixa Postal 290, Campina Grande, Paraíba, Brazil.

CASTORSEED, CARNAUBA WAX. Exportadora e Importadora do Ceará Ltda., Caixa Postal 855, Fortaleza, Ceará, Brazil.

COTTON WASTE, COTTON LINTERS, KAPOK, RAYON WASTE. Galbraith & Glycério Ltda., Caixa Postal 1950, São Paulo, Brazil.

JACARANDÁ WOOD. Instalações e Representações Magalhães Ltda., Rua Evaristo da Veiga 16, 7.°, Rio de Janeiro, Brazil.

COTTON, COTTON WASTE, SISAL FIBER, CASTORSEED. Antônio Bertino & Cia., Rua Marquês do Herval No. 119, Campina Grande, Paraíba, Brazil.

SISAL FIBERS, IRON and MANGANESE ORE, NATURAL ABRASIVES, MAGNESITE (MgO) and TALC. Large reserves available. H. B. Cavalcanti & Cia., Rua Barão do Triunfo 306, 1.°, João Pessôa, Paraíba, Brazil.

PYRETHRUM FLOWERS, SOY BEANS, TAPIOCA FLOUR, PINEWOOD. Piretro do Brasil Ltda., Caixa Postal 14, Taquara, Rio Grande do Sul, Brazil.

BABASSÚ KERNELS, TUCUM NUTS, CASTORSEED, SESAME SEED, BABASSÚ OIL, Chames Aboud & Cia., Caixa Postal 96, São Luiz, Maranhão, Brazil.

CASTORSEED, PEANUTS WITHOUT SHELLS. Irmãos Peres, Comércio e Indústria, S. A., Sala 1723, Rua São Bento 405, 17.° and, São Paulo, Brazil.

PROCESSED ANIMAL HAIR, WILD ANIMAL SKINS (Jaguatiricas, otters, leopards). Crinarte Ltda., Comércio, Indústria, Exportação, Caixa Postal 254, Ponta Grossa, Paraná, Brazil.

CAROÁ FIBER. Irmãos Khoury & Hedayioglu, Caixa Postal 56, Juazeiro, Bahia, Brazil.

BRAZILIAN No. 1 CASTOR OIL. Sociedade de Óleos Ltda., Rua Júlio Adolfo 3 (térreo), Salvador, Bahia, Brazil.

PINEWOOD, TAPIOCA FLOUR, PEARL SAGO, SASSAFRAS AND CASTOR OILS. Ernesto Mueller, Caixa Postal 277, Florianópolis, Santa Catarina, Brazil.

SISAL FIBERS, CASTOR OIL, MINERAL ORES. Francisco Melo & Filho, Avenida D. Pedro II, 144, João Pessôa, Paraíba, Brazil.

BRAZILIAN PINEWOOD, 60% in 1" thickness, 25% 1½", 15% 2", in 6, 8, 10 and 12" widths. Shipment from Itajaí, Santa Catarina. Manoel Jacinto Ferreira, Avenida Nilo Peçanha 12, 10.°, salas 1013/15, Rio de Janeiro, Brazil.

VEGETABLE OILS, ESSENTIAL OILS, VACCUM CATTLE HIDES, FIBERS, WAXES, COCOA BUTTER, OIL SEEDS, MENTHOL, etc. Thela Comercial, S.A., Praça Mauá 7, 12.°, Rio de Janeiro, Brazil.

COCOA, CAROÁ FIBER, SISAL FIBER, CASTORSEED, CASTOR OIL. Indústrias Reunidas Dafonte Ltda., Caixa Postal 1501, Recife, Pernambuco.

BABY CARRIAGES, BRAZILIAN-MADE. Indústria de Brinquedos Guaraní, Caixa Postal 232, Pôrto Alegre, Rio Grande do Sul, Brazil.

BRAZILIAN HARDWOODS (JACARANDÁ, CEDAR, PEROBA DO CAMPO, IPE TABACO, Others). Exportadora & Importadora Guavinipan Ltda., Caixa Postal 5444, Rio de Janeiro, Brazil.

TANNED ALLIGATOR PARTS (SIDES, NECKS, LIMBS, TAILS) AND ENTIRE SKINS. LAST CROP. SHIPPING SCHEDULE: MAY/JUNE AUGUST/SEPTEMBER. Fábrica de Artefatos de Couro Berco Ltda. Rua dos Inválidos 185, 1.°, Rio de Janeiro, Brazil.

BRAZILIAN HARDWOODS: JACARANDÁ and IPÉ-PEROBA. Buaiz, S.A., Caixa Postal 113, Vitória, Espírito Santo, Brazil.

DRIED BANANAS wrapped in **CELOPHANE.** Euclydes de Oliveira, Caixa Postal 1358, São Paulo, Brazil.

EQUIPMENT FOR BRICK-MAKING, WOOD-WORKING, RE-TREADING, VULCANIZING of TIRES. Máquinas Marek Ltda., Caixa Postal 48, Carazinho, Rio Grande do Sul, Brazil.

BRAZILIAN LIQUEURS, under brandnames **"OLIVETANO"** and **"ALKERMES",** Andrade & Bassi Ltda., Rua Xavier de Toledo 14, 6.°, sala 615, São Paulo, Brazil.

BRAZILIAN TIMBERS of all types. L. C. Valente & Cia., Ltda. Rua Sete de Abril 277, São Paulo, Brazil.

MAGNESITE, BERYLLIUM ORE, RUTILE, BAUXITE, GRAPHITE, MICA, SEMI-PRECIOUS STONES, QUARTZ, MANGANESE ORE, SCHEELITE, PYRITES, ROCK CRYSTAL, ANGICO BARK, IPECACUANHA ROOTS, CASHEW NUTS, EUCALYPTUS LEAVES, OILSEEDS, VEGETAL WAXES AND OILS, SUGAR, ALCOHOL AND SUGAR CANE BRANDY. Sociedade Pernambucana de Indústrias Gerais Ltda., Caixa Postal 1085, Recife, Pernambuco, Brazil.

SISAL FIBERS, LEATHER ARTICLES, COGNAC, COCOA LIQUER, EMBROIDERIES, GRATED COCONUT. Corretagens e Representações "CRISA" Ltda., Avenida Almirante Barroso 2, 11.°, sala 1106, Rio de Janeiro, Brazil.

SELLERS WANTED

COMMERCIAL REFRIGERATION ACCESSORIES, COMPRESSORS, INDUSTRIAL MOTORS, LUBRICATING OILS, INDUSTRIAL GREASES. Companhia Brasileira Mercantil do Rio Grande, Caixa Postal 1237, Pôrto Alegre, Rio Grande do Sul, Brazil.

REPRESENTATIVES

Manufacturers and exclusive exporters of **AUTO PARTS** and **ACCESSORIES** and **ELECTRICAL MATERIAL** and **EQUIPMENT** are offered exclusive representation by: Org. Brasileira de Representações Ltda., Caixa Postal 1468, Recife, Pernambuco, Brazil.

Manufacturers or exclusive exporters of **DRY BATTERIES** for **CYLINDRICAL FLASHLIGHTS, PITCH, CAUSTIC SODA, CODFISH,** are offered representation by Lascínio Carnasciali, Avenida Vicente Machado 1085, ap. 2, Curitiba, Paraná, Brazil.

U. S. manufacturers of **VITAMINS, VITAMIN COMPLEXES, HORMONES, ANTIBIOTICS** and **CHEMICAL PRODUCTS** are offered exclusive distribution in the State of Ceará by Vieira de Almeida Representações e Comércio, Caixa Postal 830, Fortaleza, Ceará, Brazil. Cable address: ALFARMA.

MISCELLANEOUS

Offers are invited on a complete shipyard, with a production capacity of 10,000 gross tons, with three building slips for vessels of 500 to 2,000 tons gross, also 2 drydocks of 2,000 to 8,000 tons gross. Companhia Brasileira de Serviços Portuários "Serviport", Praça Ramos de Azevedo 206, 19.° andar, São Paulo, Brazil.